

AMENDMENTS TO THE DRAWINGS:

Enclosed are replacement sheets of formal drawings. Please substitute the enclosed formal drawings for the informal drawings. The enclosed formal drawings contain no new matter.

REMARKS

Claims 1-10 are rejected. In this Amendment, claims 1, 3, 4, 7, 8, and 10 are currently amended, claims 2, 6 and 9 are canceled, and claims 11-23 are new. Claims 1, 3-5, 7-8, and 10-23 are pending after entry of this Amendment. No new matter is introduced by entry of this Amendment. Support for new claims 11-23 is found throughout the specification as originally filed. Support is found at least in the following portions of the originally filed specification

| <u>New Claim</u> | <u>Support in 2005/0145008</u> | <u>New Claim</u> | <u>Support in 2005/0145008</u> |
|------------------|--------------------------------|------------------|--------------------------------|
| 11 | Para. 34 | 18 | Para. 40 |
| 12 | Para. 16 & 38 | 19 | Para. 34 |
| 13 | claim 4 & Para. 42 | 20 | Para. 33 & 38 |
| 14 | Para. 38 | 21 | Para. 40 |
| 15 | Para.s 33 & 38 | 22 | Para. 40 |
| 16 | Para. 40 | 23 | Para. 16 & 38 |
| 17 | Para. 40 | | |

Applicants have carefully reviewed the arguments presented in the Office Action and respectfully request reconsideration of the claims in view of the forgoing amendments and the remarks presented below.

Claim Rejections under 35 U.S.C. § 102

Claims 1, 2, 4, and 7-10 were rejected under 35 U.S.C. § 102(a) as being anticipated by Platt (US 6,72,604). This rejection is respectfully traversed. Platt addresses only an upstream occlusion of a fluid line (see col. 1, lines 3-59; col. 2, lines 36-41; col. 3, lines 11-12; and col. 6, lines 6-10.) As is well known in the art, an occlusion of a fluid line is a blockage of that line, for example, by an external clamp that has not been removed. However, a blocked vent is not associated with an occlusion of a fluid line and the pressure changes resulting from a block vent differ substantially from that of an occlusion. A blocked vent will prevent the fluid pumped from a container from being replaced with air, but will not necessarily prevent the flow of fluid out of the container and through a fluid line. The change in pressure in a fluid line due to an occlusion of that line results in a large and rapid decrease in pressure in the fluid line. In contrast, the change in pressure in a fluid line due to a blocked vent of an upstream fluid container typically results in a progressive gradual decrease in pressure in the fluid line. Platt provides no teaching as to how to detect such a progressive gradual reduction in pressure resulting from a blocked vent.

Applicants' use of a control system that determines average pressure values over selected pump cycles permits detection of such a progressive gradual reduction in pressure. The further refinements in the dependent claims, such as determination of a slope of average values and sampling pressure over more than two pump cycles, provides Applicants' invention with more resistance to the effects of movement and environmental artifacts, which decreases the incidence of false alerts being generated.

Applicants submit that Platt fails to disclose a processor able:

to compute for each of the plurality of selected pump cycles an average pressure value from the pressure signals received, to determine a progressive reduction in pressure in the fluid line based at least on the computed average pressure values, and to generate a blocked vent alert when the progressive reduction in pressure in the fluid line is determined to be at a rate in excess of the rate expected under normal venting conditions

as recited in claim 1. Corresponding limitations are recited in independent claims 7 and 10.

Although Platt discloses using individual voltage measurements from the pressure sensor 22, such as an "initial high voltage value of a first pumping cycle," a "high voltage value of a subsequent pumping cycle," and a "low voltage value of a first pumping cycle" (see col. 5, lines 45-52), there is no disclosure or suggestion in Platt of a processor capable of computing averages of multiple measurements from the pressure sensor 22. Applicant submits, therefore, that independent claims 1, 7, 10, and the pending claims depending therefrom are novel over Platt.

Claim Rejections under 35 U.S.C. § 103

Rejection of claims 3 and 5 under 35 U.S.C. § 103(a) are traversed as these claims depend directly or indirectly from claim 1. Rejection of claim 6 under 35 U.S.C. § 103(a) are moot since these claims have been canceled.

Drawings

Applicant is submitting replacement drawing sheets showing formal figures. Applicant requests that the formal figures be substituted for the informal figures previously submitted. No new matter is introduced by the enclosed replacement drawing sheets.

Conclusion

In view of the forgoing, Applicants respectfully submit that all pending claims are in condition for allowance. Reexamination and reconsideration of the application are respectfully requested.

Respectfully submitted,

FULWIDER PATTON LLP

By:



Norman L. Morales

Registration No. 55,463

TAR:NLM:jr

Howard Hughes Center
6060 Center Drive, Tenth Floor
Los Angeles, CA 90045-1597
Telephone: (310) 824-5555
Facsimile: (310) 824-9696
Customer No. 24201
149,594.1